



## LCMOS Series C-mount USB2.0 CMOS Camera

LCMOS Camera is a luxurious USB2.0 CMOS camera with frame buffers and it adopts ultra-high performance CMOS sensor as the image-picking device, and USB2.0 is used as the data transfer interface.

LCMOS comes with advanced video & image processing application ToupView; Providing Windows/Linux/macOS/Android multiple platform SDK (Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc);

The LCMOS can be widely used in brightfield environment and microscope image capture and analysis with moderate speed.



- Standard C-Mount Camera with Aptina CMOS sensor;
- With hardware resolution among 1.2M to 14M;
- On-board memory for perfect synchronization, higher frame rate and stable performance;
- High performance cooling structure, ensures low image noise;
- USB2.0 interface ensuring high speed data transmission;
- Ultra-Fine color engine with perfect color reproduction capability;
- With advanced video & image processing application ToupView;
- Windows/Linux/macOS/Android multiple platform SDK;

## Related Models

Model in Stock LCMOS 14000KPA

Order Code	Sensor & Size(mm)	Pixel (μm)	G Responsivity Dynamic range SNRmax	FPS/Resolution	Binning	Exposure
LCMOS14000KPA	14M/MT9F002(C) 1/2.3"(5.73x4.60)	1.4x1.4	0.724v/lux-sec 65.3dB 35.5dB	2.7@4096x3288 10@2048x1644 35@1024 x822	1x1 2x2 4x4	0.4ms~2000ms
LCMOS12000KPA	12M/IMX577(C) 1/2.1"(5.95x4.71)	1.55x1.55	250mv with 1/30s 0.25mv with 1/30s	3@3840x3040 11@1920x1516 47@960x758	1x1 2x2 4x4	0.4ms~2000ms
LCMOS10000KPA	10M/IMX577(C) 1/2.3"(5.56x4.26)	1.55x1.55	250mv with 1/30s 0.25mv with 1/30s	3.3@3584x2748 12@1792x1374 53@896x684	1x1 2x2 4x4	0.4ms~2000ms
LCMOS09000KPA	9M/Special(C) 1/2.4"(5.41x4.05)	1.55x1.55	250mv with 1/30s 0.25mv with 1/30s	3.5@3488x2616 13@1744x1308 55@872x654	1x1 2x2 4x4	0.4ms~2000ms
LCMOS08000KPA	8M/Special(C) 1/2.5"(5.06x3.79)	1.55x1.55	250mv with 1/30s 0.25mv with 1/30s	4@3264x2448 15@1600x1200 62@800x600	1x1 2x2 4x4	0.4ms~2000ms
LCMOS05100KPA	5.1M/AR0521(C) 1/2.5"(5.70x4.28)	2.2x2.2	18.8ke-/lux 73dB 40dB	7.0@2592x1944 27.7@1296x972 100.5@648x486	1x1 2x2 4x4	0.2ms~2000ms
LCMOS03100KPB	3.1M/IMX123(C) 1/2.8"(5.12x3.84)	2.5x2.5	600mv with 1/30s 0.15mv with 1/30s	11.5@2048x1536 29.5@1024x768	1x1 2x2	0.2ms~2000ms
LCMOS01300KPA	1.3M/MT9M111(C) 1/3"(4.60x3.70)	3.6x3.6	2.1V/lux-sec 68.2dB 45dB	15@1280x1024 26@640x512 48@320x256	1x1 2x2 4x4	0.14ms~2000ms
LCMOS01200KPB	1.2M/AR0130(C) 1/3"(4.80x3.60)	3.75 x3.75	5.5v/lux-sec 85.3dB 44dB	28@1280x960 30@640x480	1x1 2x2	0.4ms~2000ms

## Specification

Other Specification	
Spectral Range	380-650nm (with IR-cut Filter)
White Balance	ROI White Balance/ Manual Temp Tint Adjustment/NA for Monochromatic Sensor
Color Technique	Ultra-Fine Color Engine/NA for Monochromatic Sensor
Capture/Control SDK	Windows/Linux/macOS/Android Multiple Platform SDK(Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc)
ADC	8 Bit
Recording System	Still Picture and Movie
Cooling System*	Natural with High Performance Cooling Structure
Operating Environment	
Operating Temperature(in Centidegree)	-10~ 50
Storage Temperature(in Centidegree)	-20~ 60
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 5V over PC USB Port

Software Environment	
Operating System	Microsoft® Windows® XP / Vista / 7 / 8 / 10 / 11 (32 & 64 bit), OSx(Mac OS X),Linux
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher
	Memory:2GB or More
	USB Port:USB2.0 High-speed Port
	Display:17" or Larger
	CD-ROM

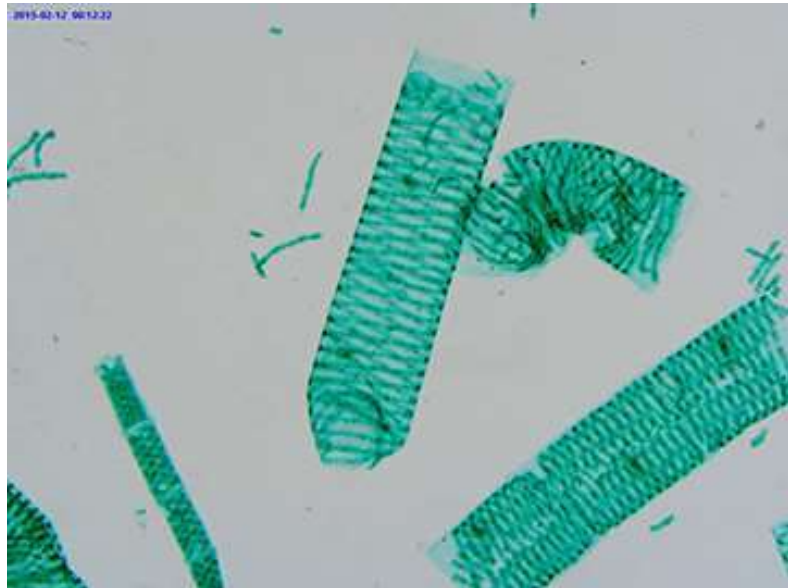
## Application

The LCMOS series can be widely used in bright field environment and microscope image capture and analysis with moderate speed.

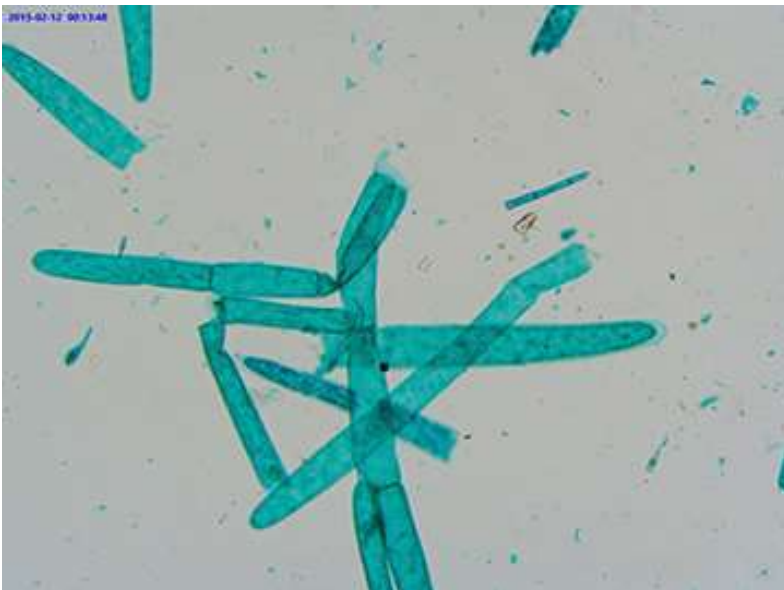
## Instance



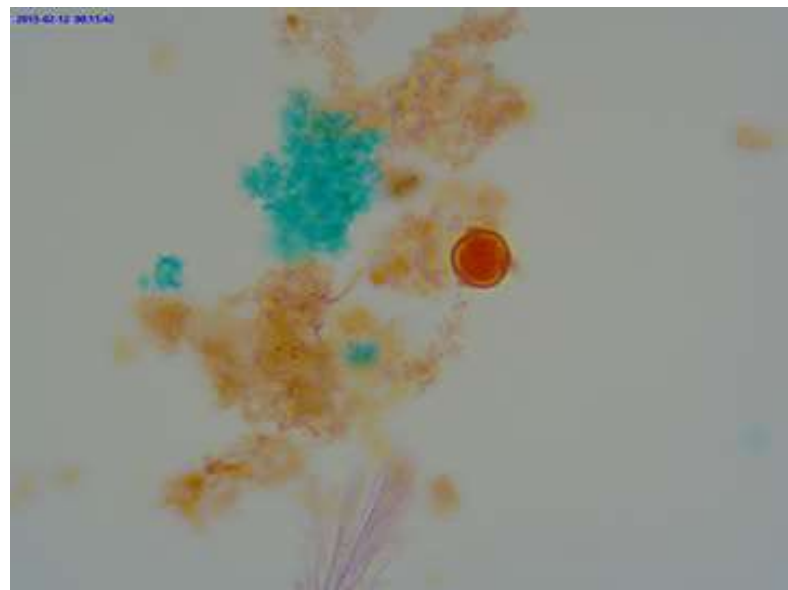
Bird Feather W.M.



Spirogyra W.M.



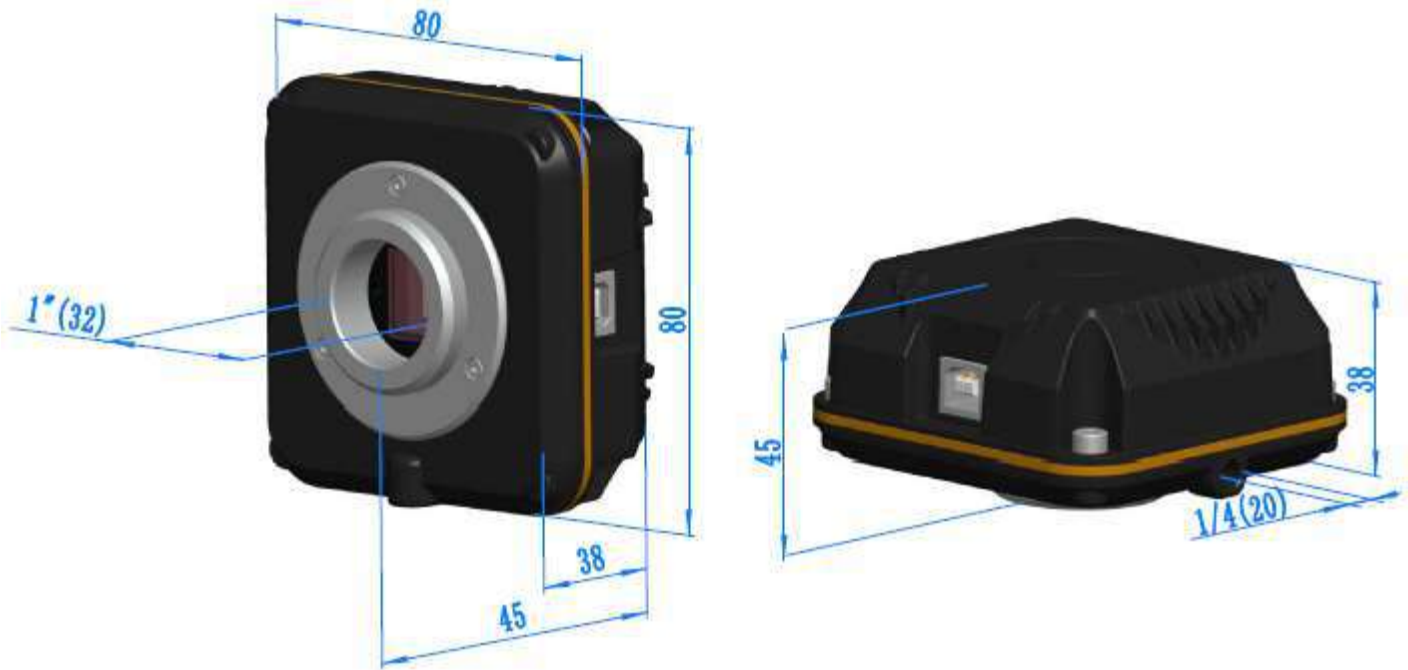
Moss Protonema W.M.



Pollen Germinate W.M.



# LCMOS Camera Dimensions



# Packing List



# Packing Information of LCMOS Series

Standard Camera Packing List			
A	Carton L:40cm W:36cm H:36cm (16pcs, 12~17Kg/ carton), not shown in the photo		
B	Gift box L:16.4cm W:16.4cm H:9.6cm (0.7~0.8Kg/ box)		
C	One LCMOS series camera		
D	High-speed USB2.0 A male to B male gold-plated connectors cable /2.0m		
E	CD (Driver & utilities software, Ø12cm)		
Optional Accessory			
F	Adjustable lens adapter	C-mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108001/AMA037 108002/AMA050 108003/AMA075
		C-mount to Dia.31.75mm eyepiece tube (Please choose 1 of them for your telescope)	108008/ATA037 108009/ATA050 108010/ATA075
G	Fixed lens adapter	C-mount to Dia.23.2mm eyepiece tube (Please choose 1 of them for your microscope)	108005/FMA037 108006/FMA050 108007/FMA075
		C-mount to Dia.31.75mm eyepiece tube (Please choose 1 of them for your telescope)	108011/FTA037 108012/FTA050 108013/FTA075
<b>Note: For F and G optional items, please specify your Camera type(C-mount, microscope camera or telescope camera) , engineer will help you to determine the right microscope or telescope camera adapter for your application;</b>			
H	108015(Dia.23.2mm to 30.0mm ring)/Adapter rings for 30mm eyepiece tube		
I	108016(Dia.23.2mm to 30.5mm ring)/ Adapter rings for 30.5mm eyepiece tube		
J	108017(Dia.23.2mm to 31.75mm Ring)/ Adapter rings for 31.75mm eyepiece tube		
K	Calibration kit	106011/TS-M1(X=0.01mm/100Div.); 106012/TS-M2(X,Y=0.01mm/100Div.); 106013/TS-M7(X=0.01mm/100Div., 0.10mm/100Div.)	